



# POLICY BRIEF

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### KEY POINTS

- Climate change can have physical and economic impacts that affect core areas of central banking and will require the use by central banks of climate risk exposure tools, such as climate-adjusted macroeconomic models and projections, rules on climate risk financial disclosures or climate-related credit rules.
- Not all available climate risk exposure tools will be appropriate in every least developed country (LDC) context. Central banks of LDCs need to consider potential impacts and tradeoffs that come with the use of such climate tools.
- There is no universal framework or general guideline for climate central banking. Therefore, central banks need to respond in line with their national contexts given their mandate.

# Climate-responsive central banking in the least developed countries<sup>1</sup>

Climate change can have physical and economic impacts that affect core areas of central banking, including inflation and financial sector stability. Central banks, including those of LDCs, need to reevaluate their options in the light of the climate crisis and the global low-carbon transition. This policy brief outlines the ways central banks can identify policy tradeoffs and determine how to best incorporate climate-responsive policy and analytical tools in their operational frameworks.

## Introduction

There is increased awareness of how climate change risks can have profound effects on financial sectors and other economic sectors. Two broad classes of climate risks can create financial stress: physical risks – arising from the direct and indirect consequences of climate-related events – and transition risks, associated with the shift towards a low-carbon economy. Examples of physical risks include increased frequency and intensity of extreme weather events, such as hurricanes and floods that damage assets and disrupt supply chains. Transition risks relate to regulatory changes, technological progress, and market shifts that impact the value of investments to which carbon-intensive industries are especially exposed.

<sup>1</sup> This policy brief is based on UNCTAD (2023). *The Least Developed Countries Report 2023: Crisis-resilient Development Finance* (United Nations publication. Sales No. E.23.II.D.27). Geneva.

An important question that arises is how central banks should respond to those risks and challenges. This question is relevant for monetary authorities in all countries but has particular significance for the least developed countries (LDCs) that are among the most vulnerable countries to the impacts of climate change. The present policy brief highlights early policy lessons for the consideration of policymakers and central bankers in LDCs.<sup>2</sup>

## Mandates and responsibilities

Central banks have statutory mandates and need to operate within the boundaries set by them. Due to the diversity of mandates and operational frameworks, central banks vary in terms of their responsibilities and abilities to respond to climate change. Most central banks of LDCs have mandates that address multiple objectives, such as price and exchange rate stability, or regulating domestic financial flows. Up to 70 percent of them are also explicitly or implicitly mandated to support government policy priorities, which by extension encompasses sustainability goals. The LDC central bank mandate to support economic development (directly or indirectly) typically results in their maintaining tighter links with government than is the case of countries where central banks operate with high degrees of independence. This may turn out to be a big advantage for a green transition-oriented approach to financial alignment, which means making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. In the LDCs this transition must concurrently achieve social progress and structural transformation through a low-carbon transition in a manner that is synergistic and leaves no one behind. There are inescapable and potentially harsh trade-offs across the policy priorities of social progress, structural transformation and inclusivity. Consequently, addressing climate challenges in LDCs requires a balancing of fundamental structural transformations driven by Governments. Central banks can only play a supportive role in this process.

## Climate-responsive central bank policy tools

Central banks in LDCs should use their mandates as a guideline to identify which climate tools they can potentially use. There are three types of climate-responsive tools that central banks in LDCs can potentially use: (i) climate-adjusted analytical tools; (ii) climate risk exposure tools; and (iii) climate mitigation and adaptation tools. Climate-adjusted analytical frameworks, such as climate-adjusted macroeconomic models and projections, enhance central banks' understanding of the way the economy and financial system can be affected by climate change, and its implications for the conduct of monetary policy. Climate risk exposure tools, which include climate stress testing, rules on climate risk financial disclosure and climate-risk-adjusted capital and reserve requirements aim at reducing the exposure of financial institutions to climate-related financial risks. Climate mitigation and adaptation tools, such as climate-related reserve requirements or credit rules, aim to contribute to the reduction of greenhouse gas emissions and help with the financing of climate adaptation investment. The applicability of the tools will vary with the central bank's mandate and related toolset.

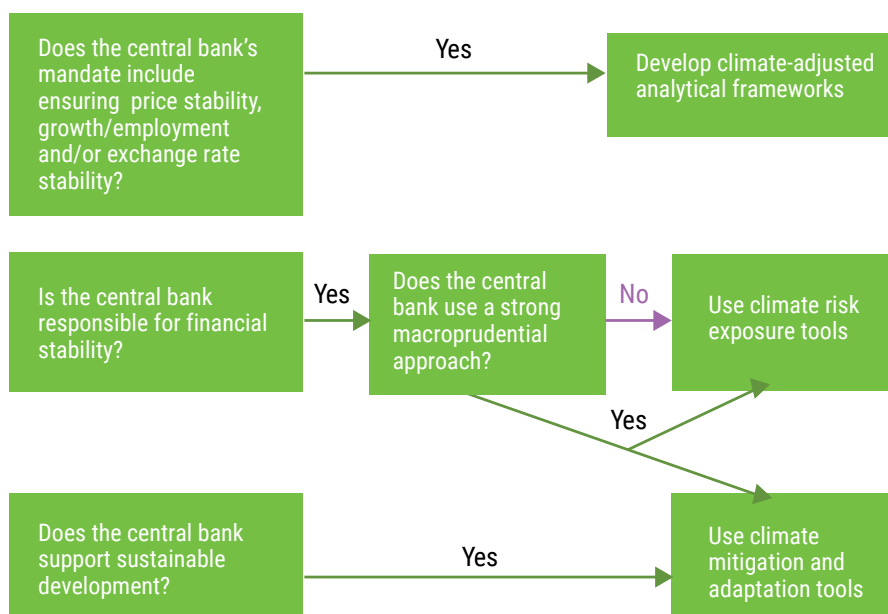
Figure 1 shows the link between mandates and climate tools. When used in an effective way, climate mitigation and adaptation tools can improve the climate resilience of the financial system and are especially suitable when central banks have an explicit target to support sustainable development. Given that all central banks in LDCs target at least one macroeconomic variable, they all need to consider developing climate-adjusted analytical frameworks as a necessity.

If financial stability is included in a central bank's mandate, it will need to consider using climate risk exposure tools to protect domestic financial institutions from exposure to climate risks. An additional issue is the extent to which a central bank uses a weak or strong macroprudential approach to financial stability. In the weak version, the feedback effects of the financial system on the macroeconomy are, in practice, not explicitly taken into account when implementing central bank policy. In the strong version, by contrast, such feedback effects are deemed to be especially important.

A strong macroprudential approach requires the use of climate mitigation and adaptation tools, as illustrated by the following two examples. First, if domestic banks provide sufficient finance for climate adaptation, companies and households will be better protected from climate-related events and will be less likely to default on their debt. This would make financial systems less exposed to physical risks. Second, the provision of more finance for decarbonization projects using the bank's climate mitigation tools could make domestic industries less vulnerable to climate policies implemented in other countries. Consequently, the domestic financial system would become less exposed to physical risks associated with the global low-carbon transition.

<sup>2</sup> More general issues relating to the role of the financial system and central banks in the low-carbon transition are discussed in UNCTAD (2019). *Trade and Development Report: Financing a Global Green New Deal* (United Nations publication, Sales No. E.19.II.D.15). Geneva.

**Central bank mandates and climate tools**



Source: UNCTAD secretariat.

**Ensuring effectiveness and coherence in the use of climate tools**

The potential to use climate policy tools is determined by a central bank’s mandate. However, the presence of a sustainability mandate is a necessary, but not sufficient, condition for a central bank in an LDC to use a climate central banking tool. Central banks will need to examine a range of other issues before they decide which tools to use. An important question is to what extent a specific climate tool has the potential to achieve the desired impact in practice. For example, in an economy in which formal credit constitutes only a small proportion of the total credit given to households and firms, the introduction of green credit controls may not have a significant impact on emissions, and therefore there is little point in using such a tool. Consequently, central bank authorities should use tools adapted to the structure of the economy and its financial sector’s level of development, as exemplified hereafter.

If a tool has been identified as having potential to achieve the desired result, the next question for central banks of LDCs is whether its use might undermine other targets, in particular primary ones, such as inclusive development and just transition. For instance, a central bank might aim at an increase in the provision of credit to support economic growth and achieve a specific inflation target. However, the introduction of climate criteria in credit controls and refinancing operations might reduce credit to carbon-intensive sectors. Therefore, the central bank needs to evaluate to what extent the increase in green credit will counterbalance the shrinking of other types of credit for the total credit to remain the same. It is also important for a central bank to consider to what extent the reduction in the credit provided to carbon-intensive sectors might undermine development targets and cause adverse distributional effects, for example, because many poor people might be working in carbon-intensive industries. In such cases, a central bank’s isolated use of climate mitigation tools is not advisable, since it does not take into account the policy trade-offs and adverse effects that such policies are likely to have. Such tools should be used only if they are accompanied by other fiscal, industrial and social policies that ensure that the target of reducing emissions will not undermine social and development targets. If coordination with other policies is not possible, the use of the tool should be postponed until a coordination mechanism has been put in place.

## Decision-making structure and policy recommendations

**Evaluate policy scope and technical capacity needs.** The central banks of LDCs should contemplate the use of central banking climate mitigation and adaptation tools only if the following conditions are met: (i) sustainable development or a strong macroprudential approach are part of their mandates; and (ii) their financial systems are sufficiently developed and used by a sufficiently large proportion of the population and the non-financial corporate sector for the measures to have an impact. Conditions (i) and (ii) are necessary, but not sufficient, for justifying the use of climate central banking tools. For example, climate tools cannot be successful without the prior development of specific green and adaptation criteria/taxonomies. Climate tools can also have adverse effects, if, for example, they lead to over-indebtedness and defaults. Such side effects of climate central banking tools need to be analyzed before central banks can consider introducing climate initiatives.

**Align across policy areas.** It is essential that climate tools are aligned with national industrial and fiscal policy targets. If a country's industrial policy has explicit green targets, any climate-related adjustments of monetary and financial tools should support those targets.

**Develop climate-responsive analytical frameworks.** Regardless of their mandate, central banks in LDCs need to develop analytical frameworks that allow them to identify the level of exposure of their financial systems and macroeconomies to risks that might stem from the implementation of climate policies by other countries, and from climate-related physical events. This is important information that should also be shared with government authorities for the planning and management of green structural transformation and the low-carbon transition.

**Seek international cooperation in building capacity.** Central banks in LDCs will require assistance from the international community to acquire the necessary technical and financial resources to deploy climate central banking tools. Accordingly, one way in which multilateral development banks could make a meaningful contribution to climate central banking in LDCs is to prioritize a focus on the development of domestic financial systems that operate transparently. This is an important step needed to ensure that gaps in essential ecosystems are plugged as quickly as possible and that data and information becomes readily available for monitoring financial alignment targets and the use of related tools.

**Avoid prescriptive approaches.** Central bank operational frameworks are diverse and the understanding of the interconnectedness between climate change and central banking is still evolving. Consequently, a universal framework or general guideline that apply in all contexts does not exist. Furthermore, there is very little literature focusing on developing economies, and in particular LDCs, where empirical research is especially constrained by the paucity of data. Nonetheless, central banks in developed and developing countries have started to explore and adapt their strategies, policies and risk management approaches in response to the dynamic and multifaceted challenges posed by climate-related risks and the global transition to low-carbon economies.

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